

Appl. No. 10/664,002
Amdt. Dated February 23, 2006
Reply to Office Action of November 23, 2005

Attorney Docket No. 89301.0002
Customer No.: 26021

REMARKS:

This is in response to the Office Action mailed November 23, 2006. Claims 1-5 and 7-13 are pending in the present application. Reexamination and reconsideration are respectfully requested.

The Office Action objects to the claims as informal. Applicant amends claims 1 and 10 to address this objection.

The outstanding Office Action advises that the applicant incorrectly identified this application as a continuation in the application transmittal letter. Applicant intends this to be a divisional application. The specification is amended by this amendment to correctly identify this application. As indicated in the outstanding Office Action, the double patenting rejection set forth in the prior Office Actions is obviated by this correction.

The outstanding Office Action refers to the statement of the double patenting rejection in the Office Action of August 3, 2005. The double patenting rejection rejected claims 1, 10 and 12 over claims 1, 4, 6 and 8 of U.S. Patent No. 6,646,975. Applicant notes that claims 1, 4, 6 and 8 of the '975 patent require a detector configured to detect first reflected light. None of claims 1, 10 or 12 of the present application recite a detector. In addition, claims 1, 10 and 12 recite that the second laser element includes "an active layer [of] a second semiconductor materials which is different from said first semiconductor material," which is not recited in claims 1, 10 or 12 of the '975 patent. As such, the double patenting rejection is inappropriate for these further reasons and should be withdrawn.

The Office Action rejects claims 1 and 3-6 over U.S. Patent 5,982,799 to Bour, et al., and rejects claims 2 and 7-9 over the Bour patent taken in view U.S. Patent No. 5,978,404 to Ishihara. The Office Action rejects claims 10 and 11 over the Bour patent taken in view of EPO patent publication 634823 that lists Valster, et al., as

inventors. Finally, the Office Action rejects claims 12 and 13 over the Bour patent taken in view of the Valster publication and further taken in view of the Ishihara patent.

The present application describes an optical assembly that can be used in an optical disk drive that can, for example, read information stored on optical disks adapted for operation at different wavelengths. The example provided on pages 13-14 of the application is of an optical assembly that outputs light at 650 or 635 nm for reading DVDs and that also outputs light at 780 nm for reading CDs. In the two laser structure illustrated in, for example, FIG. 9 of the application, the two lasers have different wavelength outputs because the composition of the active regions of the lasers have different compositions. As discussed in the application, the compact optical assembly described in the application allows much simpler beam shaping and steering optics to be used in the illumination of the optical disk and in recovering light reflected from the surface of the optical disk.

Applicant submits that the Bour patent provides a two laser structure in which the active regions of the two lasers have the identical composition. A slight difference in output wavelength is obtained by using a compressed, lossy geometry to shift the output wavelength toward a shorter wavelength output. See Bour patent, column 4, lines 7-14. The shift in output wavelength can be made to be "tens of nanometers," which is said to be appropriate for specialized printing needs. By contrast, the present application describes a two laser system that uses different composition active layers to generate different wavelengths of laser output.

Independent claim 1 distinguishes over the Bour patent by reciting "said second laser element portion including a first cladding layer, an active layer formed by epitaxially growing a second semiconductor material which is different from said first semiconductor material on said first cladding layer, a second cladding layer

formed on said active layer.” The Bour patent does not use two lasers with different composition active regions. Rather, the Bour patent specifically teaches the use of the same composition active regions with one of the active regions constrained so as to alter the emission wavelength of that laser. This structure achieves the goals of the Bour patent and so there is no reason to alter this aspect of the Bour patent’s teachings. Altering the composition of the active region, as would be required to meet the limitations of claim 1, is entirely inconsistent with the teachings of the Bour patent, which relies on the same composition active regions to achieve its results. Moreover, there is no teaching in the cited art that would allow one of ordinary skill to make a two laser structure having active regions of different compositions. Consequently, claim 1 and its dependent claims 2-5 and 7-9 distinguish over the art of record and are in condition for allowance.

Claim 10 and its dependent claims distinguish over the cited art for similar reasons. Specifically, claim 10 recites in pertinent part, “said second laser element portion including ... active layer made of a second semiconductor material which is different from said first semiconductor material.” The Bour patent does not teach the use of a second laser element with an active region made of a second semiconductor material which is different from the first semiconductor material. In fact, the Bour patent is inconsistent with such a structure. The secondary references do not suggest altering the Bour patent so that it could meet this aspect of claim 10 and certainly do not teach how such a structure could be made. Consequently, claim 10 and its dependent claims 11-13 distinguish over the art of record and are in condition for allowance.

In addition, each of claims 1-5 and 7-9 recite a two laser structure in which each of the stripes of the two lasers are the same thickness. This is not true of the

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Bour patent, as illustrated on the face sheet of the Bour patent. None of the art suggest modifying this aspect of the Bour patent.

Each of claims 10-13 recite a stripe selectively formed on a second cladding layer. This is not true of the Bour patent and the art of record does not suggest modifying this aspect of the Bour patent.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
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